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CLAIMS

1. Process for the separation of a glyoxal diacetal of formula (I)

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in which R represents a linear or branched C₁ - C₄ alkyl group, from a crude aqueous mixture comprising said glyoxal diacetal and a glyoxal monoacetal of formula (II)

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in which R is as defined above, characterized in that at least one step of countercurrentwise liquid-liquid extraction of said glyoxal diacetal is carried out using a solvent which is immiscible with the reaction medium, in order to obtain, on the one hand, a light phase comprising said glyoxal diacetal and, on the other hand, a heavy phase including the other constituents of the crude mixture.

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2. Process according to Claim 1, characterized in that said crude mixture comprises predominantly a glyoxal diacetal of formula (I) as defined in Claim 1, a glyoxal monoacetal of formula (II) as defined in Claim 1, and water.

3. Process according to Claim 1 or Claim 2, characterized in that the solvent is chosen from ethers, alkanes and aromatic hydrocarbons.

4. Process according to any one of Claims 1 to 3, characterized in that the solvent is chosen from cyclohexane, n-heptane and toluene.

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5. Process according to any one of Claims 1 to 4, characterized in that the solvent/crude mixture ratio by weight is between 0.3/1 and 5/1.